

MACEK, J.

"For Greater Economy in the Use of Compressed-Air Machinery." p. 97 (ENERGETIKA, Vol. 3, No. 3, March 1953, Praha, Czechoslovakia.)

SC: Monthly List of East European Accessions, LC, Vol. 3, No. 5, May 1954, Unclassified.

MACEK, J.

Standards of power consumption as a means for further savings in the power economy of the plants of the Ministry of the Machine Industry. 7. 110.

SC: East European Accessions List, Vol. 3, No. 9, Sept. 1954, Lib. of Congress

621.311.15
4526. Through power consumption norms towards further savings in the power economy of the factories of the Ministry of Machine Construction. J. MACEK. *Energetika [Prague] 4, No. 3, 110-14 (1954) in Czech.*
Brief account of savings achieved in recent years in the factories of the Czechoslovak Ministry of Machine Construction per unit of output, and general rules for the establishment of power consumption norms for such works. Electricity for manufacturing processes as well as fuel for heating are covered.
H. NOREL

MACEK, J.

Control of economy of operation and maintenance of pneumatic equipment.
p. 46. (Ministerstvo paliv a energetiky. Hlavní správa elektráren)
Praha. Vol. 5, no. 2, Feb. 1955.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

MACEK, J.

Macek, J. Economy in the consumption of electricity for power.
(Supplement) p.1. ENERGETIKA. Praha. Vol. 5, no. 6, June.1955,

SO: Monthly List of the East European Accession, (EEAL), LC. Vol. 4,
no. 10, Oct. 1955. Uncl.

Macek, J.

Economy in electric power consumption for electric arc welding. p. 111.

Vol. 10, no. 4, Apr. 1955.

ELEKTROTECHNIK

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 3,
Sept. 1955, Uncl.

MACEK, J.

Standardization of fuel consumption, gas, electricity, heat and water in the machinery industry. (Supplement)

P. 1, (Energetike) Vol. 7, no. 5, May 1957, Praha, Czechoslovakia

SO: Monthly Index of ~~East~~ European Acessions (EEAI) Vol. 6, No. 11 November 1957

MACEK, J.

Jiri Triska's Setreni elektrickou energii (Economical Use of Electric Power); a book review.

p. 303 (Elektrotechnik) Vol. 12, no. 9, Sept. 1957, Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, No.1, Jan. 1958

MACEK, J.

"Use of compressed air in the machinery industry."

ENERGETIKA, Praha, Czechoslovakia, Vol. 8, no. 8, August 1958

Monthly List of East European Accessions Index (EEAI), Library of Congress,
Vol. 8, no. 8, August 1959

Unclassified

MACEK, Jozse

Prof. Ernest Gaumann, voluntary. Birth lost 1918-1921 '61.

CECAVA, J.; MACEK, J.; SEL, B.

Tooth extraction in hypertensive patients. Cesk. stomat. 65
no.5:339-345 S '65.

1. II. stomatologicka klinika (prednosta prof. dr. J. Svejda, DrSc.)
a II. interni klinika (prednosta prof. dr. J. Polcak) lekarske fakulty
University J.E. Purkyne v Brne.

MACEK, Jilos; STEFANOVA, Jirina; HLOUSKOVA, Zdenka

Role of exercise therapy in chronic pulmonary diseases. Cesk.
pediat. 15 no.8:734-736 Ag '60.

I. I detska klinik KU v Praze, prednosta prof. dr. J.Svejcar
II. detska klinika KU v Praze, prednosta prof. dr. J.Houstek.
(EXERCISE THERAPY)
(LUNG DISEASE in inf & child)

MACEK, Josef, akademik

Progressive traditions of the Czechoslovak science. Vestnik
CSAV 71 no.5:485-491 '62.

MACEK, Jozse

Second contribution to the knowledge of parasitic microflora
in Styria and Carinthia. Biol vest 9:31-34 '61.

1. Biotehniska fakulteta Univerze v Ljubljani.

*

MACEK, Jozse.

"Fungi (Ustilaginales of Yugoslavia" by Vojtech Lindtner. Reviewed by J. Macek.
Biol vest 9:141-142 '61.

*

MACEK, K.

Physical findings in children in homes with improved practices in child-rearing. Cesk. pediat. 19 no.1:26-29 Ja'64.

1. Psychiatricka poradna pro deti a mladistve KUNZ Stredoceskeho kraje v Praze; vedouci: lekar MUDr. O.Kucera.

*

MACEK, K., inz.; BURIAN, M., inz.

Steel for pressed bolts. Strojirenatvi 13 no.3:197-202
Mr '63.

1. Katedra nauky o materialu, strojni fakulta, Ceske vysoke
uceni technicke, Praha.

MACEK, Karel, inz.

Servomechanisms and their use in mobile machines. Automatizace
8 no.2:40-44 F '65.

1. Research Institute of Building Constructions, Prague.

1ST AND 2ND ORDER										PROCESS AND PROPERTIES INDEX										3RD AND 4TH ORDER									
CO										Utilization as fertilizers of waste sulfite liquors from the manufacture of leather. František Duchod and Karel Macok. <i>Sborník Českoslo. Akad. Zvěstování</i> 11, 27-34 (in Russian and German 34-6)(1936).-- These fertilizers contain Ca and N. The original crude N of tannery wastes is improved by the manufg. process to a modification very sol. (50%) in H₂O. The peptns. themselves are sol. to the extent of one-third. The polysaccharides present have a lower mol. wt. than cellulose and a large quantity of Ca bound organically goes into soln. Expts. with corn in aq. medium and with oats in pots and pure sand lead to the following conclusions: The effective value of the org. N of the fertilizers amounts to 80% of that of the inorg. N (in (NH₄)₂NO₃). The reaction of the fertilizers is strongly alk. (pH = 10-11). J. Kucera										15									
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION																													
1ST AND 2ND ORDER										3RD AND 4TH ORDER																			
1ST AND 2ND ORDER										3RD AND 4TH ORDER																			

CA

PROCESSES AND METHODS INDEX

15

Influence of plant nutrients and some natural factors on the chemical composition of ash of hop leaves in the three vegetation stages. Frantick Duchek and Karel Macak. *Strovník Českoslov. Akad. Zemědělství* 17, 280-7 (197-8 in Russian and German) (1936).—On analysis of hop leaves, made in the 3 main vegetation stages, profound changes were found in the content of mineral constituents as well as of N. The aging of leaves is characterized by the decrease of N, P and K and increase of Ca and to a smaller degree by the increase of Mg, S and Cl. In the last stage Si is increased also (sclerosis). Comparison of these changes with various types of fertilization gives no simple relation. Not until the last stage of vegetation can higher N or S content be found in hops grown on soil fertilized with N and P or sulfates. Higher Cl content results from fertilization with 40% K salt. Because of the complex influence of the individual elements on the compn. of the ash of hop leaves, it is impossible to utilize the analysis of leaves as an indication for fertilizer requirements. The great effect of weather conditions can also lead to faulty conclusions. The great drought in 1934 caused an anomaly in the content of H₂O in leaves, which increased after rains in the 3 vegetation periods.

J. Kučera

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNOBLYW
TANQUES *#

165063 MAY ONLY ONE

REASTONIC

FROM BOWLING
REASTONIC ONE ONLY ASL

15

CO

The calculation of the activity of individual nutrients and of the profitability from the results of a fertilizing experiment. *Karel Maczek, Sbornik Československé Akademie věd 11: 698-704 (in Russian 554-6) (in German 556) (1936).* — For calcg. profitability of fertilization by individual nutrients no general formula can be applied from the results of their mutual action. The calcn. of profitability of the yields of fields fertilized and unfertilized is accurate. Profitableness of fertilization is ascertained precisely by Behrens' method. J. Kubera

117 AND 119 SERIES

PROCESSES AND PROPERTIES INDEX

COMMON ELEMENTS

COMMON VARIANTS INDEX

ABB-5LA METALLURGICAL LITERATURE CLASSIFICATION

SECTION 1

SECTION 2

SECTION 3

SECTION 4

SECTION 5

SECTION 6

SECTION 7

SECTION 8

SECTION 9

SECTION 10

SECTION 11

SECTION 12

SECTION 13

SECTION 14

SECTION 15

SECTION 16

SECTION 17

SECTION 18

SECTION 19

SECTION 20

SECTION 21

SECTION 22

SECTION 23

SECTION 24

SECTION 25

SECTION 26

SECTION 27

SECTION 28

SECTION 29

SECTION 30

SECTION 31

SECTION 32

SECTION 33

SECTION 34

SECTION 35

SECTION 36

SECTION 37

SECTION 38

SECTION 39

SECTION 40

SECTION 41

SECTION 42

SECTION 43

SECTION 44

SECTION 45

SECTION 46

SECTION 47

SECTION 48

SECTION 49

SECTION 50

SECTION 51

SECTION 52

SECTION 53

SECTION 54

SECTION 55

SECTION 56

SECTION 57

SECTION 58

SECTION 59

SECTION 60

SECTION 61

SECTION 62

SECTION 63

SECTION 64

SECTION 65

SECTION 66

SECTION 67

SECTION 68

SECTION 69

SECTION 70

SECTION 71

SECTION 72

SECTION 73

SECTION 74

SECTION 75

SECTION 76

SECTION 77

SECTION 78

SECTION 79

SECTION 80

SECTION 81

SECTION 82

SECTION 83

SECTION 84

SECTION 85

SECTION 86

SECTION 87

SECTION 88

SECTION 89

SECTION 90

SECTION 91

SECTION 92

SECTION 93

SECTION 94

SECTION 95

SECTION 96

SECTION 97

SECTION 98

SECTION 99

SECTION 100

MACEK
Czechoslovakia/Physical Chemistry. Surface Phenomena. Adsorption. B-13
Chromatography. Ion Exchange.

Abs Jour : Ref Zhur - Khimiya, No 7, 1957, 22557.

Author : ~~K. Macek~~

Inst : Not given

Title : Examination of Formaldehyde Reaction with n-Nitro- α -
Dichloracetamidoacetophenone by Method of Chromatography on
Paper.

Orig Pub : Chem. listy, 1953, 47, No 3, 467-469. (czech).

Abstract : No abstract.

Card 1/1

-197-

4/10
MACEK, K.,
HAIS, I. M.: Paper Chromatography (Czech)
16 *8m*

PRAGA, 1952

(3)

Paper chromatography—a new method for the characterization of binding media. Karel Macek and Mojmir Havrtil (Pharm. Biochem. Research Inst., Prague). *Umeni* (Prague) 2, 58-63(1954).—The problem of binding media is one of the most important in the technology of fine arts as the character of the painting is detd. by the kind of media and by the way the layers have been painted one over the other. In this paper an attempt has been made to find out a more suitable method for the detn. of the media. The method of paper chromatography was applied. This gave a definite simplification and at the same time some more precise information which was not attainable by older methods of analysis. According to this method, the sample of the media, including pigments, is subjected to acid hydrolysis, and by means of paper chromatography the amino acids released from protein media and the sugars released from polysaccharides can be detd. The oils have to be hydrolyzed by alkalies, and, after removing the soap, it is possible to show the presence of glycerol chromatographically. The method has been applied to investigate the presence of protein in the samples taken from murals from the 13th-14th century. Samples from an oil painting of the Antwerp Master (1520) and a guache by J. Navrátil (19th century) were also subjected to chromatographic study. The detn. of both the pigments and the various protein media can also be made more accurate and simple by paper chromatography. These applications will be the subject of further papers. Solution of these tasks can shed a new light on the complex questions concerning the technique of old masters and their implications for both the conserving and the mutual relations between the style and the development of technique.

K. Macek

MACEK, K.

"Chromatographic methods." Chemicke Zvesti, Bratislava, Vol. 8, No. 2/3, Feb./Mar. 1954, p. 112.

SO: Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

MACEK, K.

(4)
Paper electrophoresis of some pituitary hormones. K.
Macek, M. Queisnerová, and J. Hácáperková (Výzkumný
Ústav Farm. Biochem., Prague, Czech.). *Chem. Listy* 48, No. 4
627-9 (1954).—Paper electrophoresis is a suitable method
for following the sepn. of pituitary hormones, for their
characterization, and for detg. the degree of purity.
M. Hudlický

MACEK, KAREL

4

The developing process in the paper chromatography of proteins. Karel Macek (Vyzkumny ústav farm. biochem., Prague). ~~Časopis pro vědu a techniku~~ 1181-9 (1954).—Basic factors influencing the paper partition chromatography of proteins were studied with enzymes as examples. Effects of concn. gradient of the system, concn. gradient of NaCl, and of satg. the atm. of the chamber were followed. M. Hudlický.

HAIS, I.M.; MACEK, K.: FRANCOVA, V.

Paper chromatography and iontophoresis of chloramphenicol and related substances. Cesk.farm. 4 no.3:127-129 Apr 55.

1. Z Vyzkumneho ustavu pro farmacii a biochemii v Praze.
(CHLORAMPENICOL, determination,
chromatography, paper, & iontophoresis)
(ION TRANSFER,
iontophoresis of chloramphenicol)
(CHROMATOGRAPHY,
of chloramphenicol)

Dr. Macek - K

✓ Ergot alkaloids. IV. The analysis of alkaloids in single sclerotia by paper chromatography. K. Macek and S. Vankol (Výzkumný ústav pro farmakologii a biochemii, Praha). Pharmazie 10, 422-9 (1955); cf. C.A. 49, 8562 (1955). Sclerotia are ground with 5 parts of fine quartz sand and defatted with ligroine (b. up to 50°) in a micro-extractor for 4-8 hrs. Ligroine is removed *in vacuo*. Three drops of 1.5N NH_4 is added to the ergot and the drug is extr. with Et_2O , the ext. evapd. to dryness, and the residue dissolved in 1 ml. EtOH . Paper chromatography is carried out in the solvent systems formamide- CHCl_3 (C.A. 49, 85036) or formamide- C_6H_6 -ligroine; the latter permits the separation of ergocornine from ergocristine and ergocryptine. By this method it is possible to detect and to det. approx. 50 mg. or more is necessary. Alkaloids of both ergotamine and ergotamine groups are present in most sclerotia. In the "ergotamine type" ergot traces of ergotamine alkaloids also were found, and in the "ergotamine type" ergot ergosine. Known alkaloids were accompanied by a no. of further substances which fluoresce blue in ultraviolet light and some of which react with *p*-dimethylaminobenzaldehyde. In some sclerotia, alkaloid ME-57 represented the major constituent of the water-sol. group.

K. Macek

MA
11/57

①

4

A new alkaloid of ergotoxine type in ergot. Karel Vacek, Miroslav Hermanek, Stanislav Vozacek, and Antonin Cerny (Forschungsinst. Pharm., Prague). Naturwissenschaften B, 647(1955). By chromatography in a formamide-benzene-gasoline system (C.A. 50, 2924a) alkaloids of the ergotoxine group from Spanish, Portuguese, and Hungarian ergot show 4 spots; the one of highest R_f (1.15 relative to ergocryptine 1.00) is a so far unknown alkaloid (EK 115) which is present in amt. from 0 to 7% of the sclerotia. In the formamide system of Pöhm and Fuchs (C.A. 48, 11725e) EK 115 migrates with ergocryptine. EK 115 contains tyrosic acid in its mol. and a peptide chain contg. proline and leucine, but no dimethylpyruvic acid, pyruvic acid, nor phenylalanine.

B. J. C. van den Hoonaert

Use of complexons in chemical analysis. XLV. Contribution to paper iontophoresis of metals. p. 367.
CHEMICKE LISTY Vol. 49, No. 3, Mar. 1955

SO: Monthly East European Accession (EEAL), LC, Vol. 9, Sept. 1955 Uncl.

MACEK, K., AND OTHERS.

Veratum alkaloids. II. Paper chromatography of the alkaloids from Schoenocaulon officinale and some of their structural analogues. p. 539

CHEMICKÉ LISTY (Československá akademie věd. Československá společnost chemická) Praha, Czechoslovakia. Vol. 49, no. 4, Apr. 1955

Monthly List of East European Accessions (EEAI) *EC*, Vol. 9, no. 1, ^{Jan} 1960
Uncl.

MACEK, KAREL

V. Veratrum alkaloids. III. Components of veratrine.
 Zeleněk, I., Vohlíček, Karel, Macek, and Bohumil Kálek.
 49, 1638-45 (1955); cf. C.A. 50, 2621g. Chem. Listy

CH Veratrine (I) afforded, in addn. to the known alkaloids
 ceradine (II), veratridine (III), and protoveratrine
 (V), an alkaloid of the compn. $C_{17}H_{25}NO_4$, named verage-
 nine (VI). The sulfate of I (110 g.) (free base, m. 151-53°,
 $[\alpha]_D^{25} -16.8$) was dissolved in 150 ml. H_2O and treated with
 $NaNO_2$ to give a ppt. which transformed to sulfate, re-
 crystd. and decompd. with NH_3 gave III, m. 163-78° ($[\alpha]_D^{25}$
 -19.5 in $CHCl_3$), +8° (in EtOH). From the filtrate,
 NH_4OH at pH 10 pptd. 17 g. crude II which was purified by
 dissolving in 50 ml. MeOH and pptg. with H_2O at 35° to
 give 5.4 g. pure II, m. 200-12° ($[\alpha]_D^{25} -34$ in $CHCl_3$),
 12.7° (in EtOH). Ether extn. of the filtrate after the pptu.
 of II gave a residue the chromatography of which yielded by
 elution with $CHCl_3$ and crystn. from 80% MeOH, 4.1 g. II

and 682 mg. IV, m. 204-5° ($[\alpha]_D^{25} -26.9$ in $CHCl_3$), and
 by elution with MeOH, 180 mg. VI, m. 253-4° ($[\alpha]_D^{25} -1.87$
 in EtOH). The aq. layer after the ether ext. was extd.
 with $CHCl_3$ and the residue chromatographed to give 560
 mg. IV, and 590 mg. V, m. 192-4° ($[\alpha]_D^{25} -33$ in
 $CHCl_3$), -32.7° (in EtOH). From the mother liquors, after
 the crystn. of the sulfate of I, were isolated 5.55 g. ceradine
 (VII), m. 246-8° ($[\alpha]_D^{25} -52$ in $CHCl_3$), -47.5° (in Et-
 OH), and 8.55 g. V. Adding 10 g. I to a warm soln. of 15 g.
 KOH in 65 ml. EtOH, boiling the mixt. 2 hrs., dissolving the
 sepd. di-K salt of cerine (0.52 g.) in 45 ml. H_2O , satg. the
 soln. with CO_2 , and liberating the base with NH_3 gave 7.1 g.
 cerine (VIII), m. 181-90° (3.5 H_2O of crystn.), m. 177-9°
 198-200° (anhyd.). Ultraviolet spectra for V, VI, VII and
 VIII, and infrared spectra for VI and VIII are given.

M. Hudlický

Application of paper chromatography to structural problems in the Veratrum alkaloid group. K. Macek and Z. J. Vojtěšek (Pharm. and Biochem. Research Inst., Prague). *Nature* 176, 1173-4 (1955); cf. *C.A.* 50, 2622. Parallel paper chromatography of partially acylated veratrum alkalines with CHCl_3 as the mobile phase on papers impregnated with (1) HCONH_2 and (2) H_2BO_3 (5%) and showed a difference in R_F [i.e., $\log(1/R_F - 1)$] value of 0.8-1.2 for 2 glycol groups and of 0.3-0.45 for one glycol group in the parallel expts. Thus changes in R_F on acetylation, of glycol groups involved and similarly information as to the presence of an ortho ester group is obtained. Results showed that 3,4-diacetyl-, 3,16-diacetyl-, and 3,14,16-triacetylcine have 3, and 3,12(or 14)-diacetyl-, 3,4,12(or 14)-triacetyl-, and 3,4,12(or 14),16-tetraacetylcine have 1 free glycol group, while 3,4,16-triacetylcine-D-orthoacetate has no free glycol group. Results also showed that the 17,20-glycol system is probably cis, as it formed a complex with H_2BO_3 . Because results showed nonequivalence of OH groups, the expression $\log(1/R_F - 1) = R_F = Z + aG_1 + aG_2 + \dots$ is introduced where Z is a fundamental const. (for cine 2.0), $G_1, G_2, \dots$ are the group factors for the acyl groupings, and $a, a_2, \dots$ are the position values for G and a are calcd. Use of this expression makes possible the prediction of R_F and hence of R_F in the series.

F. K. Mumford

K. Macek, Prague: Verfahren zur Bewertung von Mutterkornalkaloiden

SO: Chem. Technik, Nov. 1955

Pyridine derivatives of pharmacological interest. XII.
Paper chromatography of some peripheral vasodilators.
K. Macek, Vendulka Pelcová, and Z. J. Vejdelík (Věst.
ústavu farm. a biochem., Prague). *Czechoslov. farm.* 5, 73-5
(1958); cf. *C.A.* 50, 8631f. — Nicotinic acid 2-hydroxyethyl
ester (Nihilacin) (I), diacetylmethylglycol (II), nicotinic acid
2-tetrahydrofurfuryl ester (Trafuril CIBA) (III), 3-pyridyl-
carbinol (Ronicol ROCHE) (IV), and Na salt of nicotinic
acid (Nicotlan PHILOPHARM) (V) were estd. in pharma-
ceutical prepns. by paper chromatography. The following
R_f were found: I 0.25, II 0.05, III 0.98, IV 0.13, V 0.05
with CHCl₃ on paper impregnated with formamide (50%
alc. soln.); I 0.06, II 0.70, III 0.52, IV 0.03, V 0.00 in CCl₄-
CHCl₃ mixt. (8:2) on paper impregnated with formamide;
and I 0.70, II 0.53, III 0.56, IV 0.77, V 0.17 in BuOH satd.
with 10% NH₄ soln. (1:1). A modified König's reagent was
used for detection. Both ester prepns. I and III contain a
small amt. of nicotinic acid.

K. Macek

3

Systematic analysis of alkaloids by means of paper chromatography. K. Macek, J. Macaperková, and B. Sekl (Research Inst. Pharmacy and Biochem., Prague). *Pharmazie* 11, 533-8 (1956); cf. C.A. 50, 2924a. Sixty-alkaloids of representative types were studied by chromatographic procedures, and for each appropriate solvent systems, development, and ultraviolet spectroscopy are recorded. A classification into 6 major groups is given, with 3 subgroups under the 1st classification. The following solvent systems were applied: formamide/ CHCl_3 ; formamide/ C_6H_6 - CHCl_3 (1:1); formamide/ C_6H_6 ; formamide/ C_6H_6 -chloroform (1:1); MeOH-5% aq. NH_3 / C_6H_6 (1:1:2); BuOH-AcOH- H_2O (4:1:5). Developers used were: Dragendorff reagent; nitroprusside Na ; MeCHO ; p -dimethylaminobenzaldehyde; H_2SO_4 ; KMnO_4 ; Ce sulfate; Koenig reagent; Fausly reagent; 2,4-dinitrophenylhydrazine. A systematic procedure for sepn. of mixts. of alkaloids is presented. The BuOH-AcOH- H_2O system so often used for alkaloid sepn. is totally inadequate for most alkaloids, whereas the formamide- CHCl_3 system is generally of basic application.

G. M. Hocking

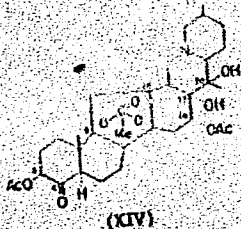
Macek, KAREL

✓ Veratrum alkaloids. IV. Analysis of veratrine by paper chromatography. Karel Macek, Stanislav Vaněček, Verduška, Felcová, and Zdeněk J. Vejdělek (Pharm. Research Inst., Prague). *Chem. Listy* 50, 668-672 (1956); cf. *C.A.*

50, 4991k. —Methods are described for evaluating comp. preps. of veratrum alkaloids. Semiquantitatively were detd. alkalines (mixture of veracevine and veragenine), cevaccine, cevaccine (I), and veratridine (II). Quantitatively were detd. I and II from 300-600-mg. samples with an error of $\pm 8\%$. Compn. is given of 3 pharmaceutical preps. (cf. *C.A.* 50, 2622; Romske, *C.A.* 47, 11665c). V. Synthesis and structure of some new esters of veracevine, veragenine, and cevaccine; partial synthesis of cevaccine and veratridine. Zdeněk J. Vejdělek, Karel Macek, and Rostislav Bodeňský. *Ibid.* 603-22. —The prepn. and properties are described of a series of derivs. of veracevine (I), veragenine (II), and cevaccine (III). The derivs. were purified by chromatography on Al_2O_3 pretreated with H_2SO_4 . Positions of esterified OH-groups were detd. by titrating with 0.1N $Pb(OAc)_2$ and 0.1N CrO_3 in $AcOH$, by infrared spectra, and by paper chromatography. I and II were obtained by the method of Kupchan, et al. (*C.A.* 49, 351e), and III was obtained by the method of Vejdělek, et al. (*C.A.* 50, 4991k). I (2.04 g.) and 0.35 g. $AcCl$ in 20 ml. pyridine at -2 to 0° yielded 830 mg. 3-acetyl-veracevine (IV), m. 203-4.5°, $[\alpha]_D^{25} -26.5^\circ$, identical with natural cevaccine. 3,4,18-Triacetylveracevine (V), m. 237-8° (from $CHCl_3$, $[\alpha]_D^{25} -21^\circ$ ($CHCl_3$), was obtained (800 mg.) by treating 1.75 g. I with 30 ml. Ac_2O and 15 ml. pyridine, also obtained (125 mg.) by heating to 110° 200 mg.

MAEK. I.
 IV, 4 ml. Ac_2O , and 2 ml. pyridine 2 hrs. at 110° . Partial methanolysis of V by evapp. a soln. of 660 mg. V in 50 ml. MeOH to dryness gave 350 mg. 3,6-diacylveracevine (VI), m. $235-7^\circ$, $[\alpha]_D^{25} -24.5^\circ$, and a small amt. of IV. IV and VI acetylated in the presence of HClO_4 each yielded 3,6,16-triacylveracevine orthoacetate (cf. Kupchan and Lavie, C.A. 50, 1885k, and Kupchan, C.A. 50, 1886g), m. $254-5.5^\circ$, $[\alpha]_D^{25} 75.8^\circ$ (EtOH). When 2.04 g. I in CH_2Cl_2 -pyridine was boiled 15 min. with 0.85 g. veratroyl chloride, the resulting mxt. gave after chromatographic sepn. 145 mg. amorphous 3-veratroylveracevine (VII), m. $170-8^\circ$, $[\alpha]_D^{25} 8.2^\circ$ (EtOH) (identical with natural veratridine), and 765 mg. 16-veratroylveracevine (VIII) m. $173-4^\circ$, $[\alpha]_D^{25} -0.5^\circ$ (CHCl_3) (identified by hydrolysis with aq. KOH to yield cevine and veratric acid). Treatment of 4 g. I with 8 g. veratric anhydride by heating the mxt. 4 hrs. in 20 ml. pyridine to $110-20^\circ$ gave 2.46 g. white amorphous 3,16-diacylveracevine (IX) m. $224-5^\circ$, $[\alpha]_D^{25} 4.6^\circ$ (EtOH), -6.5° (CHCl_3) besides 350 mg. VII and 630 mg. VIII. IX was also obtained by analogous procedure from VIII and from natural VII. When 2.04 g. I was boiled 90 min. in CH_2Cl_2 with 0.60 g. *dl*-EtCHMeCOCl (X) in the presence of 1.5 ml. pyridine the main reaction product was 720 mg. 3-(*dl*- α -methylbutyryl)veracevine (XI), m. $188-200^\circ$, $[\alpha]_D^{25} -23.8^\circ$ (CHCl_3) and 18.3° (EtOH) besides 260 mg. 3,16-bis(*dl*- α -methylbutyryl)veracevine (XII), m. 273.5° , $[\alpha]_D^{25} 8^\circ$ (EtOH), and -27° (CHCl_3), whereas treatment of 4 g. I with 7 g. (*dl*-EtCHMeCO) $_2\text{O}$ for 3 hrs. at 120° yielded 2.32 g. XII and 800 mg. XI. XII could be converted by methanolysis to XI. A mxt. of 3 g. II, 15 ml. Ac_2O , and 30 ml. pyridine gave after standing 17 hrs. 1.2 g. 3,16-diacylveracevine (XIII), m. $273-4^\circ$, $[\alpha]_D^{25} -45^\circ$ (EtOH) besides 650 mg. triacetate which has been assigned the structure of 3,16-diacylveracevine C-orthoacetate (XIV), m. 316° , $[\alpha]_D^{25} -36^\circ$ (EtOH), -38° (CHCl_3). Similarly, 2.04 g. II in 20 ml. pyridine with 0.6 g. X in 72 hrs. gave 510 mg. monoester, apparently of 3-(*dl*-

MACEK.K



α -methylbutyrylacetone (XV), m. 243° (from C_6H_6), $[\alpha]_D^{25}$ -42° ($CHCl_3$). III (3.23 g.) in 65 ml. abs. Et_2O was boiled 8 hrs. under stirring with 0.8 g. X and extd. with $CHCl_3$ and the ext. was chromatographed yielding 610 mg. 1-(α -methylbutyryl)acetone (XVI), m. 198-200° (from aq. $EtOH$), $[\alpha]_D^{25}$ 11° ($EtOH$), -10.5° ($CHCl_3$). By the procedure of Barl *in. et al.* (*C.A.* 49, 15025f), were obtained 3,4,16-tri-

3/4

MACER-K.

acetylcevine (XVII), m. above 400°, $[\alpha]_D^{25}$ 22.7° (CHCl₃).
 3,16-diacetylcevine (XVIII), 16-acetylcevine (XIX), m. 182-4°,
 and XIX perchlorate, m. 306-7°, $[\alpha]_D^{25}$ 9.6° (EtOH). On
 methanolysis, 1.3 g. XVII gave 800 mg. 3-acetylcevine. The
 and 800 mg. XVIII yielded 215 mg. 3-acetylcevine. The
 perchlorate of 3,4,12 (or 14)-16-tetraacetylcevine (XX), m. 290-
 2° (decompu.), $[\alpha]_D^{25}$ 82° (EtOH), prepd. by the method
 of Stoll (C.A. 47: 2411c) was converted to 3,4,16-triacetyl-
 cevine orthoacetate perchlorate, m. 268-9°, $[\alpha]_D^{25}$ 103° (Me-
 OH). Methanolysis of 1.7 g. XX gave 420 mg. 3,4,12 (or
 14)-triacylcevine (XXI), m. 224-30° and 304-5° (double
 m.p.), $[\alpha]_D^{25}$ 44° (CHCl₃), which yielded on methanolysis
 3,12 (or 14)-diacetylcevine (XXII), m. 236-8° (from Et₂O).
 On the basis of infrared spectra, paper chromatography, and
 CrO₃ oxidation it is suggested that in XX, XXI, and XXII,
 one AcO group is at the 12 or 14 position. Methanolysis
 of 200 mg. 3,16-dibenzoylcevine gave 60 mg. 16-benzoyl-
 cevine, m. 194-5°, $[\alpha]_D^{25}$ -22° (CHCl₃). *L. J. Urbanek*

MACEK, K.

MACEK, K. Veratrum alkaloids. V. Synthesis and structure of some new esters of veracevine, cevagenine, and cevine; partial synthesis of cevaccine and veratridine. p. 603. Vol. 50, no. 4, Apr. 1956. CHEMOTECHE LISTY. Praha, Czechoslovakia.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

MACEK, K.; VANECEK, S.; VEJDELEK, Z.

Veratrine alkaloids. VI. Contribution of paper chromatography to the solution of structural problems. p. 961. (Chemicke Listy, Praha. Vol. 50, no. 6, June 1956.)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

divalent. It is more sensitive as a detection reagent
than H_2S or $Al(OH)_3$. The effect of pH on the
reaction is discussed.

O. M. Wharton

Microbial transformations of steroids. O. Hanč, A. Šimek, M. Tadra, K. Múček, and A. Šimek (Inst. Pharmacy Biochem., Prague). *Acrometabol. Forsch.* 7, 175-6 (1967).
Incubation of *Penicillium citrinum*, *P. notatum*, and *P. decumbens* with progesterone (I) gave good yields of testosterone (II) in the nutrient; some I was recovered from the mycelium. 4-Androsten-3,17-dione gives only small yields of II. 11-Ketoprogesterone gives 11-ketotestosterone. m. p. 62-4°, $[\alpha]_D^{20} +1.333$, CHCl₃ or EtOH, $[\alpha]_D^{20} +183.3^\circ$ (1.233 in Me₂CO). 11- α -Hydroxyprogesterone gives the corresponding deriv. of II. K. Schöen

MACEK, K.; VANECEK, S.; VEJDELEK, Z.

"Veratrum alkaloids. VI Contribution of paper chromatography to the solution of problems of structure. In German."

p. 253 (COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. SBORNIK
CHECKHOSLOVATSKIKH KHMICHESKIKH RABOT. --Praha, Czechoslovakia.)
Vol. 22, No. 1, Feb. 1957

SO: Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 5, May 1958

H-17

COUNTRY : Czechoslovakia

CATEGORY :

ABST. JOUR. : RZKhim., No. 21 1959, No. 75816

AUTHOR : Macek, K., Macaparkova, J., and Kalina, K.

INST. : Not given

TITLE : The Use of Paper Chromatography in the Control of the Synthesis of Pyridoxine

ORIG. PUB. : Ceskoslov Farmac, 7, No 7, 400-402 (1953)

ABSTRACT : A chromatographic method has been developed for the determination of the substances formed in the synthesis of pyridoxine by the method of Harris and Folkers (JACS, 61, 1245 (1939)). The new procedure makes it possible to determine with sufficient accuracy the degree of purity of the individual products, the amount of side products formed, or the concentration of starting materials.

From authors' summary

CARD: 1/1

H-17

Macek, K.
Country : CZECHOSLOVAKIA
Category : Chemical Technology. Pharmaceuticals. Vitamins.
 : Antibiotics
Iss. Jour : Ref. Zhur.-Khimiya, No 14. 1959, No 50711
Author : Macek, K.
Inst. :
Title : Agitation in Accordance with the Kraig's
 Method and Its Application in Pharmacy
Orig. Pub. : Ceskosl. farmac., 1958, 7, No 9, 528-535
Abstract : Review. The bibliography of 102 titles.

Card: 1/1

H-82

MACEK, K.; VENECEK, S.

"Ergot alkaloids. XII. Paper chromatography of stereoisomeric hydroxyalkylamides of lysergic acid."

p. 553 (Chemické listy, Vol. 52, no. 3, Mar. 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9,
September 1958

Macek, K.

COUNTRY : Czechoslovakia
 CATEGORY : Physical Chemistry--Surface phenomena. Adsorp-
 tion. Chromatography. Ion exchange. +1920
 ABS. JOUR. : RZKhim., 9, 19 1959, No.
 AUTHOR : Macek, K. and Vanacek, S.
 INST. : not given
 TITLE : Investigation of Systems Including Formamide
 as the Fixed Phase in Paper Chromatography
 ORIG. PUB. : Chem Listy, 52, No 4, 518-522 (1953)
 ABSTRACT : It is shown that in paper chromatography using
 formamide (I) as the fixed phase, pure I must
 be used with a pH in the range of 5-9. The
 authors have measured the amount of I absorbed
 by some of the customary types of paper used
 in chromatography and have investigated the
 kinetics of the evaporation of I from the paper
 and of its elution by the mobile solvent as
 well as the effect of pH on separation effi-
 ciency.

Authors' summary

CARD: 1/1

VIII R = H; R' = OC  OCH

CZCCH/8-52-11-17/30 Derivatives
ids IV. Some New
ected

C28-IV. Some
alkaloids IV. Some
expected
with those
relation of
that
of the
Synthetic Models of Hypotensive Alkaloids IV. Some
expected
with those
relation of
that
of the
Synthetic Models of Hypotensive Alkaloids IV. Some
expected
with those
relation of
that
of the

Card #15

-----, Ústav pro farmaci a biochemii, Praha
Biochemiální a Biochemická Výzkum.

NOTES:

REMARKS:

Card 5/5

DIABAC, A.; MACZEK, K.; VANACEK, M.; TRCEKA, V.

Reserpine-like action of phenoharmans. Cesk. fysiolo. 8 no.3:177-178
Apr 59.

1. Vyzkumny ustav pro farmacii a biochemii, Praha. Predneseno na III.
fysiologickych dnech v Brne dne 14. 1. 1959.

(RESERPINE, rel. cpds.

reserpine-like action of phenoharmans on 5-hydroxyindole
acetic acid metab. (Cz))

(INDOLES, eff.

same)

MACEK, K.; VANECEK, S.

"Ergot alkaloids." XII. Paper chromatography of stereoisomeric hydroxyalkylamides of lysergic acid. In German. p. 315.

COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS, Praha, Czech.,
Vol. 24, No. 1, Jan. 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 9, No. 6, Sept. 59

Unclassified

COUNTRY : Czechoslovakia
CATEGORY :

B-13

ABST. JOUR. : RZKhim., No. 22 1959, No.

77929

AUTHOR : Macek, K. and Vanacek, S.

INST. : Not given

TITLE : The Investigation of Systems with formamide as
the Fixed Phase in Paper Chromatography

ORIG. PUB. : Collection Czechoslov Chem Commun, 24, No 3, 723-
728 (1959)

ABSTRACT : See RZKhim, 1959, No 14, 48920.

CARD: 1/1

59

PROCHAZKA, Z.; SANDA, V.; MACEK, K.

Paper chromatography of indole derivatives. In German. Coll. Cz. Chem.
24 no.9:2928-2938 S '59. (HEAI 9:5)

1. Abteilung für Naturstoffe, Chemisches Institut, Tschechoslowakische
Akademie der Wissenschaften, Prag. Forschungsinstitut für Pharmazie
und Biochemie, Prag. (Chromatography) (Indole)

MACEK, F.

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: [not given]
Research Institute of Pharmacy and Biochemistry (Forschungs-
institut fuer Pharmazie und Biochemie), Prague

Affiliation: Prague, Collection of Czechoslovak Chemical Communications,
Vol 26, No 11, November 1961, pp 2705-2726

Source: "Synthetic Investigations in the Group of Alkaloids with
Hypotensive Effect. XX. The Contribution of Paper Chromato-
graphy to the Investigation of the Synthesis of Reserpoids."

Data:

Authors:

✓ MACEK, K
✓ VANECEK, S

MACEK, Karel, inz.

Development of ramming and excavating machinery. Inz stavby 10
no.3:Suppl.31-35 Mr '62.

1. Vyzkumny ustav stavebni vyroby, Praha.

MACEK, Karel, inz.; POKORNY, Josef, inz., C.Sc.

Use of automation in the main building industries. Inz stavby 10
no. 8:Suppl.: Mechanizace no.8:85-87 '62.

1. Vyzkumny ustav stavebni vyroby, Praha.

SEMONSKY, M.; ROCKOVA, E.; CERNY, A.; KAKAC, B.; MACEK, K.

Substances with antineoplastic effect. Part 4 : Some γ -aryl- α, β -substituted α, β -crotonlactones. Coll Cz Chem 27 no.8:1939-1944 Ag '62.

1. Forschungsinstitut für Pharmazie und Biochemie, Prag.

BECVAROVA, Hana; HANC, O.; MACEK, K.

Course of transformation of benzaldehyde by *Saccharomyces cerevisiae*.
Folia microbiol. 8 no.3:165-169 '63.

1. Research Institute for Pharmacy and Biochemistry, Prague 3.
(ALDEHYDES) (METABOLISM) (SACCHAROMYCES)

CZECHOSLOVAKIA

MACEK, K., Pharmaceutical and Biochemical Research Institute
(Vyzkumny ustav pro farmacie a biochemii), Prague.

"A Contribution to the Paper Chromatography of Sulfonamides."
Prague, Ceskoslovenska Farmacie, Vol XII, no 7, September 63,
pp 365-366.

Abstract [Author's English summary, modified]: Solvent systems with formamide as stationary phase were used in the chromatography of sulfonamides. The formamide-chloroform system and a development lasting 6 hours proved to be the best method. Its advantage is the shorter time of the analysis, formation of concentrated spots, and better separation, especially of new and less polar sulfonamides. An addition of ethyl acetate to the mobile phase changes the order of the mobility of some sulfonamides and makes the identification more exact. Five references, including 2 Czech.

1/1

HACH, V.; KVITA, V.; KOLINSKY, J.; MACEK, K.

Contribution to the bromination in the acetophenone series. Coll
Cz Chem 28 no.1:266-271 Ja '63.

1. Leciva, Dolni Mecholupy (for Hach, Kvita and Kolinsky).
2. Forschungsinstitut für Pharmazie und Biochemie, Prag (for Macek).

MACEK, K.

Contribution on paper chromatography of sulfonamides. Cesk.
farm. 12 no.7:365-366 S '63.

1. Vyzkumny ustav pro farmacie a biochemii, Praha.
(SULFONAMIDES) (CHROMATOGRAPHY)
(SULFANILAMIDE) (SULFATHIAZOLES)
(SULFADIAZINE) (SULFAMERAZINE)
(SULFAMETHOXYPYRIDAZINE)

MACEK, K.; VANECEK, S.; BECVAROVA, H.

Chromatographic determination of some intermediate products
of ephedrine ~~synthesis~~ . Coll Cz Chem 29, no. 1:311-315 Ja '64

1. Forschungsinstitut für Pharmazie und Biochemie, Prag.

L 22915-66 EWP(1)

ACC NR: AF6014803

SOURCE CODE: CZ/0080/65/000/002/0040/0044

AUTHOR: Macek, Karel (Engineer)

ORG: Research Institute for Earthwork, Prague (Vyzkumny ustav pozemnich staveb)

TITLE: Servomechanisms and their application to movable machines

SOURCE: Automatizace, no. 2, 1965, 40-44

TOPIC TAGS: servomechanism, construction machinery, agricultural machinery

ABSTRACT: The article reviews the various types of servomechanisms and describes how some them have been applied to various movable machines (farm tractors, earth-moving equipment, etc.), but to a very limited extent. Orig. art. has: 18 figures. [JPRS]

SUB CODE: 09, 13, 02 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 003

UDC: 62-55: 621.316.71

Card 1/1

L 31947-66 EWA(d)/ENP(t)/ETI LIP(c) JD
ACC NR: AP6018258 (N) SOURCE CODE: CZ/0065/65/000/006/0526/0548

AUTHOR: Pluhar, Jaroslav; Voboril, Josef; Macek, Karel

ORG: Department of Science of Materials, CVUT (Katedra nauky o materialech CVUT);
State Research Institute of Materials and Technology, Prague (Statni Vyzkumny ustav
materialie o technologie)

TITLE: Structural stability of austenitic manganese steels

SOURCE: Kovove materialy, no. 6, 1965, 526-548

TOPIC TAGS: metal heat treatment, austenitic steel, manganese steel, carbide phase

ABSTRACT: Based on results of tests the authors offer the following conclusions. The austenitic structure in modified Mn steels of the type investigated is less stable than in steels of the classical type. The austenite in manganese steels containing more than 8% Mn remains stable up to -100C. It also remains stable after plastic deformation and subsequent freezing over the entire temperature range including deformation up to 30C and freezing down to -50C. Aside from phases forming the decomposition product of austenite during isothermal annealing of classical manganese, ferritic and bainitic reactions were found to take place. The regions and boundaries of all phases were established. Classical and modified steels show two hardness peaks as a function of temperature and isothermal annealing. The second

Card 1/2

I 31947-66

ACC NR: AP6018258

2

peak has not been reported elsewhere. The region of the first hardness peak is characterized by the precipitation of the carbide phase and the formation of pearlite or bainite. The region of high temperature maximum is produced by martensite formed in specimens cooled down from the annealing temperature. The process taking place during continuous slow heating can be equated with changes under isothermal conditions. Thermal hysteresis increases with the rate of heating and with a lower reaction temperature. The amount of transformed austenite is smaller with continuous heating. Changes appearing in the solid solution during the initial stages of continuous heating can be related to the formation of atmospheres of interstitial atoms on packing defects. This process precedes the precipitation of carbides. The article was reviewed by Frantisek Poboril, Research Institute of Ferrous Metallurgy, Prague. Orig. art. has: 21 figures and 4 tables. [GC]

SUB CODE: 11, 13/ SUBM DATE: 23May65/ ORIG REF: 005/ OTH REF: 011

Card 2/2 LC

TUREK, Bohuslav, MUDr.; MACHULA, Frantisek, MUDr.; MACEK, Milan, MUDr.

Leprosy; clinico-histological studies on two cases. Cesk. neur.
19 no.1:42-58 Mar 56.

1. Vedouci dermatovenerologického oddeleni (Turek)
2. Vedouci neurologického oddeleni (Machula)
3. Vedouci prosektury (Macek)
4. Nemocnice Cs. Cerveneho krize v Condizinu (sev. Korea)
(LEPROSY, case reports,
(Cs))

MACEK, Milan; MICHL, Jiri; HOSTOMSKA, Lidia; KUCEROVA, Maria; BRDICKA, Radim; CERNY, Milos. Techn. spoluprace:HAJKOVA,B.; WUCHOVA, J.

Shereshevskii - Turner syndrome in the light of new clinical and cytological data. Acta Univ. Carol. [med.] (Praha) 10 no.1:87-105 '64

1. Ustav vyzkumu vyvoje ditete fakulty, detskeho lekarstvi university Karlovy v Praze (reditel: prof. MUDr. J. Houstek, Dr Sc);
Ustav ser a ockovacich latek (reditel: MUDr. J.Johanovsky, CSc.);
II. detska klinika fakulty detskeho lekarstvi University Karlovy v Praze (prednosta: prof. MUDr. J. Houstek, Dr Sc) a Ustav obecné biologie fakulty vseobecneho lekarstvi University Karlovy v Praze (reditel: prof. MUDr. B.Sekla, Dr Sc).

MACEK, M.

Appearance of staphyloderma and of congenital syphilis in 1932-51. Cas.
lek. cesk. 92 no.17:463-464 24 Apr 1953. (CML 24:5)

1. Of the First Pediatric Clinic (Head--Prof. J. Svejcar, M.D.) of
Charles University, Prague.

MACEK, Milos, MUDr; SVEJCAROVA, Bela

Exercise therapy in pediatrics. Pediat. listy, Praha 9 no.4:
241-248 June-Aug 54.

1. J. Detska klinika prof. Svejcara. (kresby akad. malir Kutil.)
(PEDIATRIC DISEASES, therapy,
exercise ther.)
(EXERCISE THERAPY, in various diseases,
pediatric dis.)

MACEK, M., MUDr; JAROS, M., doc. MUDr; SVEJCAR, J., professor MUDr;
SVEJCAROVA, Bela

Present status of children's physical education and its needs.
Cesk.pediat. 10 no.3:207-211 Apr 55.

1. Z I. detske kliniky v Praze, z orthopedickeho oddeleni fakult-
niho strediska v Praze II.
(PHYSICAL EDUCATION AND TRAINING,
in Czech. current status)

GOSTOF, R., MUDr; MACEK, M., MUDr

No translation. Cest.pediat. 10 no.3:218-221 Apr 55.

1. I. detska klinika, prednosta prof. MUDr J. Svejcar.
(KIDNEYS, diseases,
 calcinosis, diag. & ther. in inf.)
(CITRATES, ther, use,
 nephrocalcinosis in child.)
(VITAMIN D, ther. use,
 nephrocalcinosis in child.)

MACEK, Milos, MUDr.; HLOUSKOVA, Zdenka, MUDr.; STEFANOVA, Jirina;
SVEJCAROVA, Bela

Physical training in certain chronic pulmonary diseases.
Cesk. pediat. 11 no.6:415-420 June 56.

1. Z I. detske kliniky, predn. prof. MUDr. J. Svejcar, z
rehabilitacniho oddel, detskych klinik, z II. detske kliniky,
predn. prof. MUDr. J. Houstek.

(LUNGS, diseases,

ther., exercise (Cz))

(EXERCISE THERAPY, in various diseases,
lung dis. (Cz))

KORECKY, B.; MACEK, M.

A simple method for the determination of intra-alveolar gas mixing
in children. Cesk. pediat. 14 no.11:996-1001 November 59.

1. Oddeleni patologicke fyziologie fak. detskeho lekarstvi, prednosta
doc. MUDr. V. Zelenka I. detska klinika, prednosta prof. MUDr. J.
Svejcar.

(RESPIRATION, funct. & tests)

KORECKY, B.; MACEK, M. za technicke spoluprace A. Machanove

On disorders of intra-alveolar gas mixing in children. Cesk. pediat.
14 no.11:1002-1005 November 59.

1. Oddeleni patologicke fyziologie fakulty detskeho lekarstvi,
prednosta doc. MUDr. V. Zelenka I. detska klinika, prednosta prof.
MUDr. J. Svejcar.
(RESPIRATION)

KRAL, Jiri; SVEJCAR, J.; JANDA, F.; MACEK, M.; MERHAUTOVA, J.; TOMANEK, J.;
SKVARA, F.

Problem of physical education of the youth. Cesk.pediat. 15 no.1:
60-67 Ja '60.
(PHYSICAL EDUCATION AND TRAINING)

BAR, V.; NOVAKOVA, M.; MACEK, M.

Changes in physical condition and ventilatory function of asthmatic children and long term results of climatotherapy. Cesk.pediat. 15 no.9:766-771 S '60.

1. Detska lecebna ve Velkych Losinach, reditel MUDr. V.Bar.
(ASTHMA in infancy & childhood)
(CLIMATE ther.)

MACEK, Milos; NOVAKOVA, Marie; STEFANOVA, Jirina; KULIKOVA, Eva

Results of physical exercise therapy in asthmatic children.
Cesk.pediat.15 no.6/7:651-654 J1'60.

1. I. detska klinika KU v Praze, prednosta prof.MUDr.Josef Svejcar.
(ASTHMA in inf & child)
(EXERCISE THERAPY in inf & child)

MACEK, Milos; KORECKY, Bohuslav; za spoluprace: NOVAKOVE, Marie; KULIKOVE, Ery

Ventilation test in asthmatic children. Cesk.pediat.15 no.6/7:604-609
Jl'60.

1. I. detska klinika KU v Praze, prednosta prof. MUDr. Josef Svejcar
Katedra farmakologie a experimentalni patologie, prednosta prof.
MUDr. Helena Raskova.

(ASTHMA in inf & child)

(RESPIRATION physiol)

DOBIAS, J.; DVORSKY, K.; KRUML, J.; MACKEK, M.

Cerebrospinal form of paragonimiasis. Cesk. neur. 23 no.1/2:
48-52 Ja '60.

1. Pat. anat. odd. na Bulovce a UDL, Praha, predn. MUDr. J.
Viklicky; Pat. anat. odd. vseob. fakulty, Brno, predn. prof. MUDr.
J. Svejda; Bakteriolog. odd. na Bulovce, Praha, predn. doc. MUDr.
V. Wagner.

(DISTOMIASIS)

(CENTRAL NERVOUS SYSTEM dis.)

UHLIR, J.; POTRUSIL, B.; HANZL, J.; JOBANEK, B.; MACEK, M.; IVORAK, J., ins.

Contribution to the problem of terylene tissue prostheses. Rozhl.
chir.39 no.11:721-726 N'60.

1. II. chirurgická klinika v Brně, přednosta prof. dr. Jan Navrátil
I. patologicko-anatomický ústav v Brně, přednosta prof. dr. Jaroslav
Svejška. Vyskumný ústav pletarský v Brně.
(ARTERIES surg)

MACEK, M.

Leiomyoma of the caudal vena cava. Cas.lek.cesk.99 no.30-31:
975-976 22 J1 '60.

1. Patologickoanatomicky ustav v Brne, prednosta prof. dr. J.Svejda.
(LEIOMYOMA case reports)
(VENAE CAVAE neopl)

ZEMAN, E.; DVORAK, M.; MACEK, M.

Functional changes in the kidneys during the course of tuberculous pyelonephritis. Polski przezl. chir. 33 no.114:1371-1378 '61.

1. Z Sanatorium Prędocigruzliczego w Jevicku Kierownik: dr M.Dvorak
i z Zakladu Anatomii Patologicznej Wydzialu Lekarskiego Uniwersytetu
w Brnie Kierownik: prof. dr J.Svejda.
(TUBERCULOSIS RENAL physiol)

MACEK, M.; NOVAKOVA, M.; KORECKY, B.

Proposal for a new expiratory index received from the curve of expiration in timed vital capacity of the lungs. Cesk. pediat. 17 no.1:38-43 Ja '62.

1. Oddeleni telovychovneho lekarstvi katedry nemocnicni pediatrie, prof. dr. J. Svejcar Katedra farmakologie a experimentalni patologie, predn. prof. dr. H. Raskova.

(RESPIRATION physiol)

KURES, H.; MACEK, M.; VEJMOLOVA, J.

On the significance, possibilities and methods for the examination of respiratory mechanism. Cesk. pediat. 17 no.5/6:401-405 Je '62.

1. Katedra nemocnici pediatrie fakulty detskeho lekarstvi University Karlovy v Praze, vedouci prof. MUDr. J. Svejcar, DrSc.

(RESPIRATION in inf & child)

MACEK, M.; KURES, H.; VEJMOLOVA, J.; SPICAK, V.

Some aspects of the examination of pulmonary elasticity in asthmatic children. Cesk. pediat. 17 no.5/6:406-408 Je '62.

1. Katedra nemocnicni pediatrie fakulty detskeho lekarstvi University Karlovy v Praze, vedouci prof. MUDr. J. Svejcar, DrSc. Odd. telo-
vychovneho lekarstvi, vedouci MUDr. M. Macek, CSc.

(LUNGS physiol) (ASTHMA in inf & child)

HNÍK, I.; KUREŠ, H.; MACEK, M.

Effect of artificial resistance on the respiration in children. Česk.
pediat. 17 no.5/6:409-411 Je '62.

1. Katedra nemocniční pediatrie fakulty dětského lékařství University
Karlovy v Praze, vedoucí prof. MUDr. J. Svejcar, DrSc.

(ASTHMA in inf & child) (RESPIRATION physiol)

CZECHOSLOVAKIA

MACEK, M., MD, Docent, Dean of the Faculty of Pediatrics (Fakulta detskeho lekarstvi), Charles University, Prague.

"An Address Made on the Occasion of Granting Honorary Doctorates"

Prague, Casopis Lekarů Ceských, Vol CII, No 35, 30 August 63, pp 949-950.

Abstract: On 21 August 1963, during the session of the Second International Pharmaceutical Congress in Prague, honorary degrees were granted to S.V. ANICHKOV, president of the Soviet Pharmaceutical Society, D. BOVET, Nobel Prize Winner, and C. SCHMIDT, professor of the university of Pennsylvania.

MACIEK, Milosh [Macek, Milos]; STEFANOVA, Irina [Stefanova,
Jirina]; SHVEYTSAROVA, Bela [Svejcarova, Bela];
BARKHASH, I.M. [translator]; STRAKOVSKAYA, V.L., kand.
med. nauk, red.

[Exercise therapy in children's diseases. Translated from
the Czech] Lechebnaia fizkul'tura pri detskikh bolezniakh.
Moskva, Meditsina, 1964. 335 p. (MIRA 17:7)

MACEK, M.; MICHL, J.

Importance of tissue culture for cytogenetics. Cesk. pediat.
19 no.3:243-246 Mr'64

1. Ustav vyzkumu vyvoje ditete fakulty detskeho lekarstvi
KU v Praze (reditel: prof.dr. J.Houstek, DrSc) a Ustav ser
a ockovacich latek, odbor tkanovych kultur (reditel: MUDr.
J.Johanovsky, CSc.)

*

MACEK, M.

Cultivation of human diploid cells and its importance.
Neoplasma (Bratisl.) 12 no.4:445-447 '65.

1. Research Institute of Child Development, Faculty of
Pediatrics, Prague, Czechoslovakia. Submitted January
16, 1965.

L 2060-66

ACCESSION NR: AP5027291

CZ/0053/65/014/002/0093/0097

AUTHOR: Chvapil, M.; Macek, M.; Hurych, J.

TITLE: Physiology of fibroblasts. Study of biosynthesis of collagen in tissue cultures of fibroblasts

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 2, 1965, 93-97

TOPIC TAGS: cytology, tissue physiology, biosynthesis, biochemistry, amino acid, protein, histology, cell physiology

ABSTRACT: Physiology of fibrogenous cells, osteoblasts, and chondroblasts is discussed; morphological characteristics are described, mitochondria, cytoplasmatic granules and their composition are discussed. Free aminoacids characteristic of collagen accumulating in fibroblasts are evaluated. Biosynthesis of collagen proteins in ribosomes, shape changes in endoplasmic reticula are discussed. Investigation of collagen structure by X-ray diffraction, electron microscope, chemical analysis, and sequential

Card 1/2

L 2060-66

ACCESSION NR: AP5027291

analysis is described. Biophysics, chemistry, interaction of molecules, transverse aggregation, pathology, and homeostasis of tropocollagen, its precursors, and its polymerisation are described. Study of fibroblastic effect of industrial dusts by means of tissue cultures is discussed. Certain concentration of silicic acid induce collagen formation. Collagen metabolism in diploid cells is discussed. Diploid cells die in a 3rd generation, unlike heteroploid cell strains. Diploids maintain 46 chromosomes modus. Content changes of protein in fibroblasts according to origin are described. Hydroxyproline content of cells is discussed. Collagen protein metabolism study by means of tagged amino-acids and tagged S is described. Orig. art. has: 2 tables.

ASSOCIATION: Ustav hygieny prace a chorob z povolani, Prague (Institute of Work Hygiene and Occupational Diseases); Ustav vyzkumu vyvoje ditete fak. detsk. lek. KU, Prague (Institute for Research of Child Development, Faculty of Pediatrics, KU)

SUBMITTED: 00

ENCL: 00

SUB CODE: LS

NR REF SOV: 001

OTHER: 020

JPRS

Card 2/2

MACEK, M.

Contribution to the cultivation of human leukocytes in vitro.
Cesk. pediat. 20 no.1:49-55 Ja '65

1. Ustav vyzkumu vyvoje ditate fakulty detskeho lekarstvi
Karlovy University v Praze (reditel - prof. dr. J. Houstek,
DrSc.).

KURES, H.; MACEK, M.; VAVRA, J.; VEJMOLOVA, J.

Ventilatory mechanics in diffuse lung fibrosis. Cesk. pediat.
20 no.3:375-378 Mr '65

1. Pediatric Faculty of Charles University, Prague.

CZECHOSLOVAKIA

UDC 612.23:616.24(612.24)-373.173

VAVRA, J.; MACEK, M.; Chair of Medical Science for Physical Development, Faculty of Pediatrics, Charles University (Katedra Telovychovneho Lekarstvi Fakulty Detskeho Lekarstvi KU), Prague, Head (Vedouci) Docent Dr M. MACEK.

"Distribution of Gases in the Lungs at Different Levels of Respiration."

Prague, Casopis Lekarů Ceských, Vol 105, No 39, 23 Sep 66, pp 1064 - 1068

Abstract [Authors' English summary modified]: The distribution was studied by the method of analysis of the expired nitrogen. At different levels of the pulmonary volume small amounts of oxygen were administered; during subsequent expiration the nitrogen concentration in the expired gas was determined. Findings in patients with asthma and with emphysema are compared to findings on healthy subjects. 3 Figures, 1 Table, 12 Western references.

1/1

CZECHOSLOVAKIA

UDC 616.248-053.2-07:616.24-072.7

VEJMOLOVA, J.; KURES, H.; MACEK, M.; Department of Medicine of Physical Education, Faculty of Pediatrics, Charles University (Katedra Telovychovneho Lekarstvi Fakulty Detskeho Lekarstvi KU), Prague, Head (Vedouci) Docent Dr M. MASEK.

"Hyperventilatory Changes of the Endexpiratory Level in Asthmatic Children."

Prague, Casopis Lekarů Ceských, Vol 105, No 49-50, 9 Dec 66, pp 1377 - 1381

Abstract [Authors' English summary modified]: Voluntary hyperventilation with active expiration was studied using 6 various frequencies in 2 groups of children: 53 healthy ones, and 53 symptom-free asthmatic children. The hyperventilatory response depends on the frequency and was different in the two groups. The most characteristic differences between the two groups were found in a frequency of breathing of 37.5 cycles per minute. At this frequency the pathological functional changes in asthmatic children are most obvious. 2 Figures, 2 Western, 3 Czech references.

1/1

MACEK, Olga

Nurse in industry. Higijena, Beogr. 6 no.1:90-98 1954.

1. Centralni higijenski zavod, Zagreb.
(INDUSTRIAL HYGIENE
nurse in)
(NURSING CARE
in indust.)

MACEK, Olga, dr., Zagreb

Public health station within an enterprise. Narodno zdrav., Beogr.
10 no.11:339-343 1954.
(INDUSTRIAL HYGIENE
in Yugosl.)